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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,419	06/21/2001	Johan Scott	886A.0021.U1(US)	7642

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HARRINGTON & SMITH, LLP
4 RESEARCH DRIVE
SHELTON, CT 06484-6212

EXAMINER	
PESIN, BORIS M	

ART UNIT	PAPER NUMBER
2174	

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/886,419	SCOTT, JOHAN	
	Examiner	Art Unit	
	Boris Pesin	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,6-8,10-16,23-26,30-35,37-42 and 44-48* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3, 6-8 10-16, 23-26, 30-35, 37-42, and 44-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This communication is responsive to the amendment filed 09/06/2006.

Claims 1-3, 6-8 10-16, 23-26, 30-35, 37-42, and 44-48 are pending in this application. Claims 1, 44 and 48 are independent claims. In the amendment filed 09/06/2006, claims 1, 10, 12, 23, and 37 were amended, claims 4-5, 9, 17-22, 27-29, 36, and 43 were canceled, and claims 44-48 were added as new. This action is made Final.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 3, 6, 7, 8, 14, 15, 23-26, 30, 31, 32, 33, 34, 35, 37, 38, 39, 40-41, 44, 45, 46, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (US 6435969) in view of Bird et al. (US 6323884).

In regards to claim 1, Tanaka teaches a method of selecting an object by controlling movement of a focus on a graphical display comprising receiving a signal for moving the focus in a given direction (i.e. Column 20, Lines 40-59); providing, in response to receiving said signal, predefined acceleration data for accelerating said focus in said given direction (i.e. Column 20, Lines 60-66); determining a position of the focus on the graphical display as a function of said acceleration data (i.e. Column 20, Lines 60-66); and displaying the focus at said position (i.e. Column 20, Lines 40-59). Tanaka further teaches receiving a signal from a dual-state button having a single depressed state, for moving the focus in a given direction on said display (i.e. Column 20, Lines 60-66).

Tanaka does not teach highlighting an object for selection using said focus; and receiving an instruction to select said focus. Bird teaches highlighting an object for selection using said focus; and receiving an instruction to select said focus focus (i.e. "adds emphasis such as a highlight colour or animation of the selected button", Column 3, Line 16). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tanaka with the teachings of Bird and include a method of highlighting one object for selection with the motivation to provide the user with a clearer understanding of which object is selected.

In regards to claim 2, Tanaka and Bird teach a method further comprising determining an acceleration of the focus as a function of the acceleration data (i.e. Tanaka Column 20, Lines 60-66).

In regards to claim 3, Tanaka and Bird a method further comprising determining a velocity of the focus in dependence upon the acceleration (i.e. Tanaka Column 20, Lines 60-66).

In regards to claim 6, Tanaka and Bird a method, further comprising updating the acceleration using some or all of the acceleration data (i.e. Tanaka Column 20, Lines 60-66), updating a velocity and position of the focus and displaying the focus at the updated position (i.e. Tanaka Column 20, Lines 60-66).

In regards to claim 7, Tanaka and Bird a method further comprising determining whether the velocity of the focus exceeds a predefined maximum (i.e. Tanaka Column 20 Line 45 – Column 21 Line 17).

In regards to claim 8, Tanaka and Bird a method, further comprising limiting the velocity of the focus if it exceeds s a predefined maximum (i.e. Tanaka Column 20 Line 45 – Column 21 Line 17).

In regards to claim 14, Tanaka and Bird a method wherein the focus is a pointer (i.e. Tanaka Column 20, Lines 40-59).

In regards to claim 15, Tanaka and Bird a method wherein the focus is a part of a page content (i.e. Tanaka Column 20, Lines 40-59).

In regards to claim 23, Tanaka and Bird disclose determining in dependence upon said direction of motion which of one plurality of objects is the intended

destination of the focus (i.e. "automatically moving the pointer to that destination", Bird Column 2, Line 7) and highlighting one object for selection (i.e. "adds emphasis such as a highlight colour or animation of the selected button", Bird Column 3, Line 16).

In regards to claim 24, which is dependent of claim 23, Tanaka and Bird disclose a method wherein the determining of which one of said plurality of objects is the intended destination comprises determining which of said objects is closest to the focus (i.e. "...nearest selectable GUI element to the user-indicated position will typically be identified in the prediction result", Bird, Column 9, Line 9).

In regards to claim 25, which is dependent of claim 23, Tanaka and Bird disclose a method wherein the determining of which one of said plurality of objects is the intended destination comprises determining which of said objects substantially lies in the path of the direction of motion (i.e. "In an alternative embodiment which determines a region of the GUI towards which the user is moving a pointing device based on the initial position and direction", Bird, Column 9, Line 24).

In regards to claim 26, which is dependent of claim 23, Tanaka and Bird disclose a method wherein the determining of which one of said plurality of objects is the intended destination further comprises defining a metrics system (i.e. Tanaka Column 20 Line 45 – Column 21 Line 17).

In regards to claim 30, Tanaka and Bird a method wherein providing predefined acceleration data for accelerating said focus in said given direction comprises adding at least one data value to a buffer of acceleration data values (i.e. Tanaka Column 20, Lines 60-66).

In regards to claim 31, Tanaka and Bird a method wherein providing predefined acceleration data for accelerating said focus in said given direction comprises updating a buffer of acceleration data values (i.e. Tanaka Column 20, Lines 60-66).

In regards to claim 32, Tanaka and Bird a method comprising reading out a data value at a front of said buffer and calculating a velocity and a position of said focus using said data value (i.e. Tanaka Column 20 Line 45 – Column 21 Line 17).

In regards to claim 33, Tanaka and Bird a method wherein said buffer is updated whenever a signal from said dual-state button is received (i.e. Tanaka Column 20 Line 45 – Column 21 Line 17).

In regards to claim 34, Tanaka and Bird a method wherein reading said data value and calculating said velocity and said position is repeated every time a frame on said display is updated (i.e. Tanaka Column 20 Line 45 – Column 21 Line 17).

In regards to claim 35, Tanaka and Bird a method wherein acceleration data is in the form of impulse data (i.e. Tanaka Column 20 Line 45 – Column 21 Line 17).

In regards to claim 37, Tanaka and Bird a method wherein determining said velocity comprises adjusting said velocity for friction so as to reduce said (i.e. Tanaka Column 20 Line 45 – Column 21 Line 17).

In regards to claim 38, Tanaka and Bird a method further comprises: receiving another signal from a dual-state button having a single depressed state, for moving the focus in an other, different direction (i.e. Tanaka Column 20 Line 45 – Column 21 Line 17); providing, in response to receiving said other signal, other predefined acceleration data for accelerating said focus in said other, different given direction (i.e. Tanaka

Column 20 Line 45 – Column 21 Line 17); determining a position of the focus on the graphical display as a function of said acceleration data (i.e. Tanaka Column 20 Line 45 – Column 21 Line 17).

In regards to claim 39, Tanaka and Bird a method wherein providing predefined acceleration data for accelerating said focus in said other given direction comprises adding at least one data value to another, different buffer of acceleration data values (i.e. Tanaka Column 20 Line 45 – Column 21 Line 17).

In regards to claim 40, Tanaka teaches all the limitations of claim 1. Tanaka does not teach determining a distance between the focus and the object as a radius using a coordinate system that is rotated and compressed in a direction of movement of said focus; and if said object has the smallest determined radius, marking said object as a selected object. Bird teaches "... heuristic to predict the intended destination of a user-controlled mouse pointer movement and then automatically moving the pointer to that destination."(Column 2, Line 6). He further teaches that his invention "adds emphasis such as a highlight colour or animation of the selected button"(Column 3, Line 16). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tanaka with the teachings in Bird and include a predicting where the pointer's destination is, and then highlighting that object with the motivation to provide for easier selection of items within a GUI environment.

In regards to claim 41, Tanaka and Bird teach all the limitations of claim 40. Tanaka does not specifically teach rotating the coordinate system so that it becomes aligned with the direction of said velocity. However this feature is inherent in Tanaka. If

a user was to play a three dimensional game using Tanaka's invention, the screen would rotate according to the direction of the velocity of the user.

Claim 44 is in the same scope as claim 1; therefore it is rejected under similar rationale.

In regards to claim 45, Tanaka and Bird teach an apparatus according to claim 44, which is a multimedia home product (See Tanaka Figure 1).

In regards to claim 46, Tanaka and Bird teach an apparatus according to claim 44, which is a computer (See Tanaka Figure 1).

Claim 48 is in the same scope as claim 1; therefore it is rejected under similar rationale.

Claims 16 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al. (US 6435969) in view of Bird et al. (US 6323884).

In regards to claim 16, Tanaka and Bird do not teach a method according to claim 1 wherein the focus is a window. However, official notice is given that it is well known in the art to implement a method according to claim 1, wherein the focus is a window. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tanaka-Bird and include a method wherein the focus is a window with the motivation to provide more data on the screen simultaneously.

In regards to claim 47, Tanaka and Bird do not teach an apparatus according to claim 44 which is a mobile telephone computer. However, official notice is given that it is well known in the art to implement a user interface in a mobile phone. It would have

been obvious to one of ordinary skill in the art at the time of the invention to modify Tanaka-Bird and include the user interface capability in a mobile phone for easier selection of objects in a mobile phone.

Claims 10, 11, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable Tanaka et al. (US 6435969) in view of Bird et al. (US 6323884) in view of Yamada (US 5874941).

In regards to claim 10, Tanaka-Bird teaches all the limitations of claim 1. Tanaka-Bird does not specifically teach a method of claim 1 wherein said providing predefined acceleration data comprises adding a first set of acceleration data to a second set of acceleration data. Yamada teaches a method for "adding the first and second cursor moving values [acceleration] to first and second cursor values corresponding to the position of the cursor displayed at present."(Column 3, Line 12). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tanaka-Bird with the teachings of Yamada to include a way to add sets of acceleration data together with the motivation to provide for efficient movement in response to a user movement of the cursor.

In regards to claim 11, Tanaka-Bird and Yamada teach "the acceleration signal is controlled to be zero [i.e. predefined] when the pointer is stopped" (Yamada, Column 8, Line 52).

In regards to claim 12, Tanaka-Bird and Yamada teach all the limitations of claim 10. They do not teach a method further comprising determining a velocity of the focus

by adding a first member of the acceleration data to a previously determined velocity. Official notice is given that velocity as a function of time is well known in the art as: $v = v_o + a\,t$ where v_o is the initial velocity (at t = 0), v is the velocity of the object at time t and a is the acceleration. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tanaka-Bird and Yamada and use the function in order to calculate the velocity with the motivation to provide for efficient movement in response to a user movement of the mouse.

In regards to claim 13, Tanaka-Bird and Yamada teach "the acceleration signal is controlled to be zero [i.e. predefined] when the pointer is stopped" (i.e. Tanaka Column 20 Line 45 – Column 21 Line 17).

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable Tanaka et al. (US 6435969) in view of Bird et al. (US 6323884) and further in view of Rutledge et al. (US 5764219).

In regards to claim 42, Tananka and Bird teach all the limitations of claim 41. They do not teach a method further comprising compressing said coordinate system in direction of said velocity by a compression factor k/(|v| + 1), where |v| is the speed of the focus and the k is the scaling constant. Rutledge teaches, "The coordinate of this graph is cursor velocity, the abscissa is force, in percent of the corresponding scale factors. The velocity scale factor (multiplier of v in the above formulas) is 1500 pixels/second, or on a screen, 66 cm/second." Column 3, Line 23). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Tanaka

and Bird with the teachings of Rutledge and include a method of changing the coordinate system with the motivation to provide for a convenient method of reducing image size and providing improved control of a pointing device.

Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Pesin whose telephone number is (571) 272-4070. The examiner can normally be reached on Monday-Friday except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristine Kincaid
KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

BP

Notice of References Cited	Application/Control No. 09/886,419	Applicant(s)/Patent Under Reexamination SCOTT, JOHAN	
	Examiner Boris Pesin	Art Unit 2174	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,323,884	11-2001	Bird et al.	715/810
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
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FOREIGN PATENT DOCUMENTS

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	P					
	Q					
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	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
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